Mastoplasty for Massive Bilateral Benign Breast Hypertrophy Associated with Pregnancy: *

Case Report

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REDUCTION mastoplasty for benign breast hypertrophy has become a useful procedure for the relief of symptoms produced by large breasts. This report presents a very unusual bilateral massive hypertrophy of the breasts aggravated by pregnancy and treated by mastoplasty. It is not the purpose of this paper to discuss the relative merits of the different methods of surgical correction. Each procedure [1, 3, 4] has its advantages, depending upon the problem involved.

Case Report

A white woman, age 29, gravida 3, para 2, was admitted to the Presbyterian-St. Luke's Hospital surgery clinic in March 1963. She complained of progressive massive enlargement of her breasts during the previous 18 months. She had had two previous normal pregnancies. Results of physical examination and laboratory tests were normal except for the obvious increase in breast size and recent progressive enlargement of the uterus. Endocrine therapy had been given in the form of testosterone injections prior to each menstrual period for several months but was discontinued as ineffective.

In March 1963, after cessation of menstrual periods, a diagnosis of pregnancy was made. With the onset of her third pregnancy, the breasts further enlarged at a very rapid and alarming rate. This had not taken place during her previous pregnancies. The only different factor was that she now had a new husband.

Accompanying the breast enlargement, cellulitis, lymphedema and venous thrombosis developed in each breast. The skin broke down and ulcerated in dependent areas. As the breasts continued to enlarge, the areas of ulceration increased due to further skin necrosis. Bed rest with elevation of the breasts was ineffective. Antibiotic therapy was administered and may have kept the infection under control.

Although the patient's general physical condition remained normal, the underlying cause of the breast hypertrophy was never determined. Bilateral simple mastectomy was considered but because of the cellulitis, lymphedema, thrombosis and open wounds, the procedure was not carried out. In addition, it seemed psychologically unwise to sacrifice both breasts when a more conservative compromise would appear to offer a better result. Accordingly, bilateral reduction mastoplasty with free transplantation of the nipples and their areolae was recommended.

Because the pathologic process was becoming rapidly and progressively more complicated, termination of her pregnancy was advised and carried out by the obstetrical service during the patient's fourth month of pregnancy. This operation was followed by profuse lactation in both breasts despite diethylstilbestrol therapy. Lacteal fluid even drained through the ulcerated areas (Fig. 1).

The patient was kept at partial bed rest with her breasts elevated in preparation for elective operation. During this period, several small thin split-thickness skin grafts were applied to the open ulcers in an attempt to convert these areas into healed wounds. This was partially successful but many grafts floated away because of the underlying surge of milk. During this period the breasts became smaller and softer but the over-all massive size required surgical correction.

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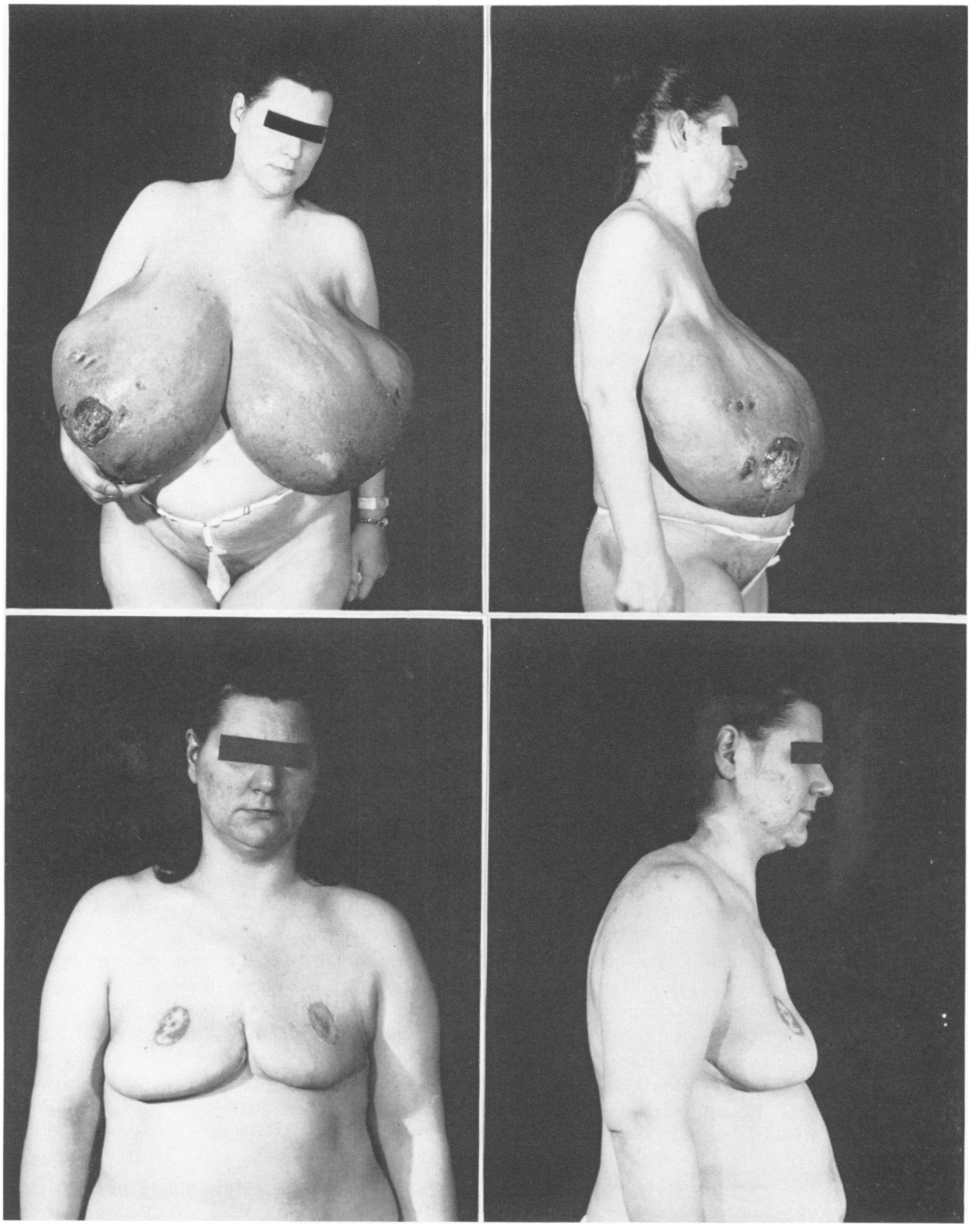

FIG. 1. (Top) Breast size at 5th month of pregnancy. Note areas of ulceration following spontaneous skin necrosis.

FIG. 2. (Bottom) Postoperative appearance 2 months after surgery. 75% growth of nipples and areolae was obtained. Transplanted nipples demonstrate erectile response.

Two months after termination of pregnancy, the left breast was operated upon. The areola was thick and leather-like in consistency. Clear lymph escaped through incisions in the areola and skin. Many dilated lymphatics and veins were transected in the deeper portions of the breast. Some of the veins were as large as 1 cm. in diameter. Many individual masses of varying sizes were found in the breast. Resection and reshaping of the preserved upper portion of the breast was followed by free transplantation of the nipple and reduced attached areola. Despite the poor quality of the transplanted tissue, more than 75% growth followed. The resected breast mass weighed 13 pounds.

Three weeks later the right breast was operated upon in similar fashion. More than 75% take of the grafted areola and nipple was also obtained on this side. The resected right breast mass weighed 15 pounds.

The pathologic diagnosis was "gigantic hyperplasia of the breasts with residual lactational qualities. There were many fibroadenomas and cysts. No areas of malignancy were encountered."

The patient made an excellent recovery and is relieved of her physical burden (Fig. 2).

Discussion

We are reporting this case because of the unusual size of the breast. An extensive review of the literature shows reports of a few other comparable problems, going back as far as 1699.[2] Until the advent of operations for reduction mastoplasty in recent years, all earlier reports recommended bilateral simple mastectomy. Now that the more conservative approach is becoming better known and understood, some type of reduction mastoplasty appears to be the obvious procedure of choice for correction of massive benign breast hypertrophy.

Summary and Conclusions

An unusual case of bilateral benign breast hypertrophy associated with pregnancy is reported.

An excellent result was obtained by subtotal resection of each breast in two separate operations. The nipple and attached areola were transplanted as a free graft in each reconstructed breast. The transplanted nipples developed sensory return and demonstrated erectile response 8 months after operation.

References

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